Components for nano-scale Reactor Abstract

Microfluidic devices and methods for operations on micro through nano-meter scales. Methods of processing, handling and analysis of yocto-liter scale volumes. Methods and devices for singlemolecule transports in milli-scale dimensions. Methods of laser propulsion of individual cells and droplets. Methods of packaging and manufacturing of micro and nanofluidic devices. Method of improving dispensing accuracy. Methods of uses and manufacturing of micro-optico-fluidic devices. Bottom up processing method. Ionic particle deflector device. Smart package device and methods for high-throughput synthesis and screening. Methods and devices for controlled refills of micro stamps. Methods and devices for insitu concentration and dilution of micro volumes of solids and liquids. Methods and devices for eliminating undesirable dry outs and evaporation of microscale volumes of fluids.